

THE RAP CYCLE

Preliminary prospectus submittals - February, even years

WAC 136-161; sections 010 - 030

The preliminary submittals are due at the CRAB office by March 1st of even numbered years. This is the first step in the process of building the regional priority arrays from which projects will be selected for funding. The March due date is chosen so that CRAB staff can schedule a field trip to visually rate the road surfaces of the proposed projects before the construction season commences, and while the roads typically are in their roughest condition.. The County Engineer or an assistant familiar with the project and the county's long-term plans should participate in the field review. In addition to doing the visual rating, this review team may discuss why the project is being submitted, the overall scope, and possible project alternatives. The timing of the spring review is also chosen so that a preliminary project priority array is in place prior to CRAB budget submittal for the next biennium. CRAB's biennial budget is submitted to the legislature in November of even years.

The preliminary submittals are reflections of the 'wish list' counties have regarding use of RATA funds. Enough projects are submitted so that the county has a few options. It also helps the county engineer to assess and compare the likelihood of future funding (RAP or otherwise), political support, and basic project design issues among the various projects. The visual rating of many projects and the resulting visual array help to indicate project competitiveness in the region as well. On the basis of these considerations, the engineer prepares the final submittals, which are due at CRAB by September 1 of even years. Usually the number of projects in the preliminary submittal should be at least twice the amount of funding the county will be eligible for in the upcoming biennium (see WAC 136-161-030). The estimated funding amount is reported to the counties in the letter calling for preliminary prospectus submittals (usually sent by early February). This estimated funding amount is referred to as the county funding limit throughout the funding cycle (see WAC 136-161-080).

Checklist of items on or as part of the preliminary prospectus:

- Road number, Legislative District
- Federal functional classes 02, 06, 07, 08, and 09-bridge replacement.
- Vicinity map
- Description of improvements should indicate the following:
 - Existing and proposed surfacing
 - Existing and proposed width
 - Whether or not alignment issues are present and will be resolved
 - Other safety issues to be dealt with.
- Maximum RATA matching percent should not be exceeded in each eligible phase and in total cost.
- Listing of supplementary funding if known at this point.
- Designation of project type

The preliminary prospectus should verify that the project is indeed eligible for RATA funding. Eligible federal functional classes are 02, 06, 07 and 08. Functional class 09 roads are eligible for bridge replacement projects only. Structures less than 20 feet in length cannot be submitted as bridge projects. The project must also be in the county's jurisdiction at the time the Final Prospectus is submitted unless jurisdiction is jointly held with a neighboring Washington State county. In the case of a jointly owned road or bridge, the county submitting the proposal should gain the adjoining county's approval of the scope of work, and should clearly define the extent of each county's responsibilities in the final prospectus.

Submittal considerations:

NE Region Bridges that are not federally funded must compete as road projects. If the improvement is rehabilitation of the bridge it would compete as a 3R project. If the improvement is replacement of the bridge, it project must compete as a reconstruction project.

SE Region bridges have a separate category for non federal aid bridge projects called "Stand Alone" SA bridge projects.

If the structure is less than 20 feet in length it should be submitted as a road project with a large culvert. Remember that the rating criteria may not address the existing condition and the project may not rate well.

There must be an existing road to rate in order to submit an application. Submittals for a proposed additional new corridor or bypass or a study for a possible road will not be accepted. In some cases however, where a proposed new alignment is far removed from the original road, but still shares common termini with it, that proposal can be submitted and the original road structure, geometry, safety and traffic must still be rated since those conditions will be improved. The road that is replaced is then either closed off or converted to a local access road.

Visual surface rating - field review - March Through June, Even Years
WAC 136-161-040

After the preliminary submittals are collected, CRAB staff will contact each of the county engineers to arrange visits to the proposed projects. The county can best estimate the time needed for the reviews, and the CRAB reviewer should be careful to allow enough time. A county visit will normally require at least one full day, but some counties may require two depending on county size and number of projects. Enough time should be taken to discuss project scope and other funding issues with the county engineer.

The overall trip should be planned to include a visit also to adjacent counties to make most efficient use of travel. Trips to the far corners of the state may require a full week or more of travel each. To prevent travel fatigue, these areas may be done in two or more separate trips. The draw back to multiple trips is the loss of time available to do the rest of the counties. This is usually not a problem if the reviews are begun early enough in the season. Any CRAB staff person licensed as a professional engineer can do the field reviews. One person however, must rate all projects in a region in order to maintain uniformity of ratings in each region.

The time duration for visually rating a section of road will vary among raters. It is important to spend relatively the same amount of time per mile on each project. Projects exhibiting the most distresses may, of course, take longer to rate than those with few distresses. Raters who are new to the process will want to become familiar with the rating sheet in each region before actually rating a proposed project. A practice run on various sample road sections that exhibit many failure types is a good idea. Inviting a seasoned rater along will help as well. Once the process is understood and the rater's eye is 'calibrated', the rating of real projects can go rather quickly. The speed of the vehicle should not exceed 30 miles per hour, and the rater should get out of the vehicle and examine the road surface in detail from time to time to verify what is being observed. A pavement's deficiencies are easy to see after a rainfall (pooling in ruts, slower evaporation in cracks), whereas a dry pavement will hide the same deficiencies and could be incorrectly rated higher if the rater is not careful to slow down and look closer.

The reference for visual rating of paved surfaces is the "Pavement Surface Condition RATING MANUAL" written by the Northwest Pavement Management Association. This document is sponsored by the Northwest Technology Transfer Center of the Washington State Department of Transportation. The manual describes the evaluation of both ride characteristics and structural condition characteristics.

While the WSDOT relies on structural condition only in the priority ranking of their road surfaces, the Pavement Surface Condition RATING MANUAL also contains methods for rating the roads smoothness and is therefore a reflection of county preference to rate both ride *and* structural condition.

Assembling the visual ratings array - June, even years

After all the projects in a region have been field reviewed, the region wide list of projects, ranked in descending order of project type and then by visual rating, are sent to the engineer in each county.

Sorting by project type applies only to the NE and SE regions where the counties have chosen to dedicate a percentage limit of their regional allocation of funds to certain project types. In the NE region the categories are Federal Aid (FA) Bridge, 3R, and Reconstruction. In the SE region they are FA Bridge, Stand Alone (SA) Bridge, and Road projects.

Road project types in the SE NW and SW regions can be either 3R or Reconstruction and they compete against each other on the same array with no limit of funding to either category. Road project types in the PS region can be roadway, intersection or bridge, but they as well compete on the same array with no limit of funding to either type.

In the SW region, the visual rating of a PCC or ACP over PCC surface gives much higher point values than ACP surfaces. Therefore a note indicating the PCC surface type on these usually higher rated surfaces should be added.

This visual array listing must include the county name, road name, project type, beginning and ending mileposts, estimated cost, RATA funds requested, and the visual surface rating. The estimated total funding that will be available to the region and the county limits of funding are referenced. The county limit is based on the most recent revenue estimate and any estimated interest accruals anticipated for the RATA account in the coming biennium. The limits will change slightly prior to the approval of projects after the State Treasurers office submits new revenue estimates. Any CRABoard approved increases or emergency funding the county may have gained in the current biennium reduces the limit of funding available to the county in the next biennium, and this should be indicated as well.

The visual listing helps the counties to decide which projects to submit as part of their final prospectus package. The list, with cover letter, is sent to the counties by the end of June. The letter should stress that the total RATA funding that can be requested on the final array is limited to twice the estimated county RATA funding limit. This estimate will be included in the letter.

Assembling of final prospectuses - July through August, even years

With the visual ratings in hand, the county engineer can specify project scope, clarify major design issues, and estimate the overall project cost. These parameters are established to assist the county engineer in deciding which projects to support before his board, and finally to submit to CRAB.

During this time the engineers may have numerous questions about eligibility and revenue scenarios. The RAP engineer can be very helpful in answering these questions. The RAP Engineer, or any CRAB staff, should be careful however to note that no funding scenario is guaranteed at any time. The estimates of project cost submitted by the county are accurate enough to preclude requests for additional funds later in the middle of design or construction. The CRABoard will not approve requests for increased RATA funding that are due to poor original cost estimating or design assumptions.

The final project prospectuses are due at CRAB by September 1, even years.

Review of final prospectuses - September and October, Even Years

The prospectus is a description of work to be accomplished on and improvements made to a substandard RAP eligible road or bridge. Since it becomes part of the CRAB/County contract when RATA funds are approved, its contents are important. The project description must indicate specific improvements to be made, such as: “Two reverse curves located at the end of the proposed section having a design speed of 15 miles per hour will be replaced with one smooth curve designed for the standard 50 miles per hour for this road”. Other conditions such as structural deficiency, width, grade, substandard slopes, ditches, sight distance and other traffic and safety issues should be addressed in the same manner.

Design Standards

The prospectus must indicate to CRAB if full design standards will not be achieved, and that approval of a deviation from design standards is being sought from WSDOT’s Highways and Local Programs Office. Any road condition not being brought to full design standards as described in the Local Agency Guidelines must gain a deviation approval from the Highways and Local Programs Engineer of the WSDOT. The CRABoard has neither the authority nor the personnel to approve road designs. Therefore all projects, except those that are not changing the alignment more than 50% of the project length, or those gaining deviation approvals, must be constructed to full design standards regardless of the source of other funding.

Review of scoring points

With the above design requirements in mind, the scoring of each ranking category should be reviewed for consistency with the scope of work indicated in the project description. No points are allowed for conditions that will not be improved. Points will be limited to the extent of proposed improvement. For example, the road may have enough substandard curves that it could score the maximum geometric points. Yet if only half the curves will be improved to full standards then the total points assigned should be half the points that the project would have received if all were improved. As another example, if an existing 30-mile per hour curve will be improved only halfway (40 miles per hour) to the 50 mile per hour design speed, the condition gets half the points allowed. This can be calculated for all substandard curves on the project to arrive at an average.

The history of accidents must be the most recent years except the current one, unless the county engineers in the region agree upon a different year series, as circumstances and availability of collision data may dictate.

The NW and SW regions use automated methods to rate the structural condition of paved roads. The prospectus from these regions must include the resulting deflection data, particularly the “Design Rebound Deflection” number, as attachments. The numbers are plotted on graphs included in the worksheets

The RAP engineer should check that the amount of RATA funds requested doesn't exceed the regional matching limit, which is 90% in all regions except the Northwest. The Northwest region's matching limit is 80% RATA funding. The prospectus must indicate the road number, legislative district, and federal functional class of the road. Any other funding sources the county has applied for or gained should be indicated on the form. This information will be important in the event that the anticipated sources become unavailable after RATA funding has been approved. The county will then have a greater chance of gaining CRABstaff support when it asks the CRABoard for a RATA increase to make up for the unexpected short fall.

Finally, the prospectus must include a vicinity map with clear definition of the project limits, existing and proposed roadway cross sections, and the county engineer's and commissioner's signatures.

Assembling the preliminary array - September and October Even Years

The RAP engineer uses the prospectus data to assemble regional project arrays on spreadsheets or data bases for the competitive funding of projects based on the ranked criteria contained in the rating worksheets. These completed worksheets are attached to the prospectus. Projects from the current biennium array, which did not gain full funding of the original RATA amounts requested, are added to the top of the proposed array. These partially funded projects will gain further or complete RATA funding as part of the new array, before the new projects. The array is presented to the CRABoard at its next quarterly meeting, usually sometime in the fall. It also supplements the CRABoard's budget request to legislature, which is submitted each November of even years. A copy of the array is then sent to the counties. It must not contain notations as to whether a particular project will be funded, but should again show the county funding limit and the anticipated revenue for the upcoming biennium.

At this time the project list is accurate to the extent that no other projects, other than bridges, can be added to the array. The eventual funding level on the array is not known at this time. The published array at this time must include at least the following disclaimers:

The revenue estimate will change prior to actual approval of projects.

Some projects on the array may be withdrawn.

Future project withdrawals will make additional funds available.

Funding amounts for partially funded projects listed at the top of the array may change.

Adjustments to the preliminary array - prior to adoption, November even years to April odd years.

From November, even years, up to final array adoption at the spring CRABoard meeting, odd years, a number of adjustments will occur to the preliminary array, namely:

1. Final biennial funding of partially funded projects in the current array: The final funding available in the current biennium is not actually known until the last quarter of the biennium. This affects the amount of partial funding projects receive from the current array and the amount of additional funding the project will receive from the ensuing biennium array.
2. Update of the estimated fuel tax revenue for the biennium being obligated. The most recent estimate (usually reported by the Office of the State Treasurer in the month of February or March) is used for the final array. This will slightly change the total funding and the county limits for the biennium. This revised revenue estimate will be used throughout the remainder of the biennium for project funding.
3. Withdrawal of projects previously funded in preceding biennium. A project that gains funding from the current array late in the biennium may also have been submitted for funding on the ensuing biennium's preliminary array. If this is the case, the project on the preliminary array will be dropped unless the requesting county submits a written withdrawal of the project already funded. The RAP Engineer should initiate contact with the county in these matters.
4. Addition of bridge projects to the arrays. Since the BRAC (Bridge Replacement Advisory Committee) meets bi-annually, a number of bridges will become eligible for federal funding that the counties could not have anticipated in time for the preliminary submittals. Bridges can therefore be added at any time throughout the biennium. This is preferred over a premature submittal when assurance of federal funding and costs to construct are unclear.
5. Changes in the submitting county's priorities, or other unanticipated circumstances that affect the support of a ranked RAP project. This can occur for a number of reasons such as unanticipated high environmental or property costs, shortfall of other anticipated funding, lack of political support by the local community, or ineligibility caused by diversion of road levy funds for non qualifying purposes. See WAC 136 chapter 150 for details.

Conditions of funding – Prior to CRABoard meeting, odd years

WAC 136-150

The initial approval of funding for the highest ranked projects on the array occurs at the last quarterly CRABoard meeting (sometime in the spring, odd numbered years) prior to each new biennium. Prior to the meeting, the counties must meet certain conditions in order to gain funding for their projects. These conditions include, but are not limited to:

Certification by the county that expenditures of its road levy funds in the prior year were for road purposes only. Road levy funds may however be used for traffic law enforcement, except that the amount diverted shall not exceed the amount spent on traffic law enforcement. This certification is provided to the CRAB office no later than February 1 of each year. Counties of population less 8,000 are exempt from this requirement.

Inclusion of all proposed projects on the county's most recent six-year road construction program: If it is not listed on the original program, the county must amend the program to include it. Otherwise the project will be dropped from the priority array.

Pursuit of full design standards on each proposal, or a written deviation approval from WSDOT's Regional Highways and Local Programs Engineer prior to the spring CRABoard meeting. (Sample deviation request form, Appendix C)

Every RAP project shall be subject to final examination and audit by the state auditor. In the event such an examination reveals an improper certification on the part of a county relative to compliance with provisions of WAC 136-150, the matter shall be placed on the agenda of the next CRAB meeting. Improper certification may be cause for the CRABoard to withdraw or deny the certification of good practice of that county; and/or to require that all, or part of, RATA funds received by the county be returned to the CRABoard.

Selection and initial allocation of RATA funds to projects – Spring CRABoard meeting, odd years

Partially funded projects from the previous biennium array are placed at the top of the new array for completion of originally requested funding. After these are funded the remaining array of new projects is funded in descending rank order as defined by each region's rating system.

If one of the new requests is a duplicate of a funded project from the previous biennium, then the county forfeits the new requested funding unless the county's commission chair has requested in writing that the old funding and project be withdrawn. The county is not always aware of a project's imminent funding at the end of a biennium, and therefore will normally leave a new request on the proposed array until it is sure it has the funding requested from the old one. Two identical projects, nevertheless, cannot be on the same funded array. The county will be considering the effect of withdrawals on other projects and their likelihood of funding as well. In answering these questions, the RAP engineer must be careful to not mislead the county into assuming funding is guaranteed for any project for which there is no CRAB – County contract. The RAP engineer can explain the funding array process and the amount of funding expected to the region. The final decision to keep a project funded or on the array however, is solely the county's.

Projects that will not achieve design standards will not be funded unless the county has gained written deviation approval from the WSDOT assistant secretary for Highways and Local Programs. Failure of the WSDOT Director for Highways and Local Programs to report in response to a deviation request within thirty days of receipt of such request shall be considered as approval.